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(54) Bath preparations

(57) New bath preparations in water-  
soluble sachets composed of a fluid  
cosmetic base, 90% or more

anhydrous, contained in a sachet  
formed from a polyvinyl alcohol film.

A foam bath, a foaming bath oil or a  
bath oil can be used as the cosmetic  
base.

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## SPECIFICATION

## New bath preparations in water-soluble sachets

The invention relates to the field of cosmetics, more particularly to a new kind of packaging for bath preparations.

The subject matter of the invention relates to new bath preparations in water-soluble sachets composed of a fluid cosmetic base contained in a sachet formed from a polyvinyl alcohol film.

The subject matter of the invention is in particular a preparation as defined above, in which the said cosmetic base, 90% anhydrous, is a foam bath, a foaming bath oil or a bath oil. The invention is defined in the claims.

Since the beginning of time, baths have not been limited to the sole purpose of cleaning the body. Baths are taken increasingly for reasons relating to body care, medical treatment or for the simple pleasure of being in contact with this natural element, water. The temperature of the water has a cooling or warming effect; the cleaning procedure and the care combined with these bath products and the perfume released therefrom are reviving, refreshing and relaxing.

There have recently been considerable developments in the field of cosmetic preparations for the bath, particularly that of foam baths. These products are essentially composed of synthetic surfactants and water, as shown by the following general formula:

	Surfactants	15—50%*
	Fatty acid alkylamides	5—10%
	Water	30—60%
35	Preservative	0.1—1%
	Softening agent	1—5%
	Perfume	1—5%
	Colorant	q.s.

\* by weight

Mainly sold in a liquid form, foam baths are generally packaged in bottles of varying capacities, either with or without a metering stopper, or in tubes, particularly when they are in the form of gels.

In view of the fact that there is a high proportion of water in products of this kind, it is necessary to store, transport and package considerable volumes of liquid, while only approximately half of the latter is in fact used in the form of active products. Furthermore, the presence of water necessitates the use of preservatives intended to prevent the proliferation of microorganisms during storage.

In fact the use of bottles with metering stoppers permits an adequate amount of product to be added to the bath water. Frequent use of these, however, often causes the said bottles to become increasingly clogged, the external surface of which bottles then soon becomes sticky, or even unattractive. On the other hand, if the metering stopper is rinsed after use, there is a risk

of water being reintroduced into the bottle, thus diluting its content and proportionally decreasing its efficiency when it is used at the same volume.

The invention proposes a new method of packaging which permits the disadvantages inherent in the use of preparations currently known, particularly foam baths, to be easily overcome.

The new preparations according to the invention are in the form of water-soluble sachets which are intended to be added to the bath water when the bath starts to fill. They consist of an actual sachet made of a water-soluble polymer material, polyvinyl alcohol (PVA) in this case and containing a fluid cosmetic base.

In comparison with other water-soluble polymer materials, such as polyololides, for example, PVA has the advantage of being totally soluble in bath water. It is also easy to weld, which permits sachets to be made using present technological means, such as a simple pulse welder, for example.

Moreover, PVA films are impermeable to gases and perfume vapours, resistant to fatty substances, particularly those used in cosmetics, and stable with respect to light. PVA also has the advantage of being satisfactorily tolerated by the skin and mucous membranes; it is also totally biodegradable. From a cosmetic viewpoint, PVA permits flexible and translucent sachets to be produced, which are soft to the touch and can be made in any imaginable shape.

The PVA films used for the manufacture of water-soluble sachets according to the invention are obtained from a specialised trade. Their thickness will be determined in particular by the stresses which they will have to support and by the desired speed of dissolution. This thickness will generally be between approximately 30 and 50 microns for a weight per surface unit of between approximately 40 and 60 g/m<sup>2</sup>. The best results were obtained by using films having a thickness of approximately 35 microns for a weight per surface unit of 45 g/m<sup>2</sup> (density 1.28).

According to the invention, the cosmetic base packaged in PVA sachets is a fluid base, 90% or more anhydrous. It has in fact been found that, beyond this limit rate, a reduction in the mechanical properties, even aesthetic properties of PVA occurs.

The fluid cosmetic base may be a foam bath, a foaming bath oil or a bath oil, for example; it is obtained from ingredients generally used in the art. It may be perfumed and coloured as desired and also contain products for caring for the skin, such as softening or superfatting agents. If desired, it is also possible to incorporate in the base agents for making it opaque or giving it a lustre; in the opposite case the said base will preferably be completely translucent.

In view of the low water content, the use of preservatives is no longer necessary. The base is also protected from any external contamination by its individual wrapping. The base volumes used are also reduced, as it were, by half, as a result of

which less space is required, particularly during storage of the water-soluble sachets.

The new bath preparations according to the invention are in the form of unit doses, adapted to the standard volume of baths. These doses, preferably perfumed at a rate of 6 to 10% by weight, weigh between approximately 10 and 15 g. As they take up a minimum amount of space and are easy to transport, they are particularly useful for hotel rooms, for example, and for travelling.

The formulation of the fluid cosmetic bases used in the new bath preparations according to the invention can be found in the specialised literature (see, for example, Dehydag Information Edition 04/78, published by Henkel KGaA Düsseldorf—Federal Republic of Germany). Several examples are given below, purely as an indication.

20		<i>Parts by weight</i>
	a) <i>Foam bath</i>	
	ZETESOL 100 (Zschimmer & Schwarz)	72
	CETIOL HE (Henkel)	10
25	1,2-propylene-glycol	10
	Perfume	8
	Colorant	as desired
	b) <i>Foaming bath oil</i>	<i>Parts by weight</i>
30	TEXAPON WW 99 (Henkel)	70
	CETIOL HE (Henkel)	15
	EUTANOL G (Henkel)	10
	perfume	10
	Colorant	as desired
35	c) <i>Bath oil</i>	<i>Parts by weight</i>
	DEHYDOL LS 2 (Henkel)	10
	AETHOXAL B (Henkel)	40
	CETIOL (Henkel)	30
40	MYRITOL 318 (Henkel)	15
	Perfume	5
	Colorant	as desired

The following example shows how the water-

soluble sachets to which the invention relates can be obtained. This example is not limiting.

#### Example

PVA film: 35 microns  
45 g/m<sup>2</sup>  
density 1.28

obtained by hot-pressing commercial PVA powder.

#### Sachet manufacture

A sleeve having a width of 4 cm, measured flat, was prepared from the above-mentioned PVA film. The sleeve thus obtained was welded at one end and then filled with a fluid cosmetic base of a foam bath type. The desired unit doses were subsequently obtained by welding the sleeve, which had been thus filled, at regular intervals, approximately every 5 cm. The unit dose thus prepared weighs approximately 14 g.

All the welds were formed by means of a commercial pulse welder.

#### Claims

1. New bath preparations in water-soluble sachets, composed of a fluid cosmetic base contained in a sachet formed from a polyvinyl alcohol film.

2. Preparation according to claim 1, characterised in that the cosmetic base is 90% or more anhydrous.

3. Preparation according to one of claims 1 and 2, characterised in that the cosmetic base is a foam bath.

4. Preparation according to one of claims 1 and 2, characterised in that the cosmetic base is a foaming bath oil.

5. Preparation according to one of claims 1 and 2, characterised in that the cosmetic base is a bath oil.

6. Preparation according to claim 1, characterised in that the polyvinyl alcohol film is between approximately 30 and 50 microns thick and weighs between approximately 40 and 60 g/m<sup>2</sup> per surface unit.